

Fault Abstract for Cycle starting 17 July 2005

Week				Cycle Category
7/17	7/24	7/31	8/7	Total
3.88	0.13	0.61	3.51	8.1 VUV Downtime
0	0	0	0	0.0 VUV Regulation and Compliance Downtime
3.7	2.73	0	0.62	7.1 X-Ray Downtime
0	0	0	0	0.0 X-Ray Regulation and Compliance Downtime
7.83	27.37	0.68	4.2	40.1 Equipment Downtime

X-ray Downtime Areas				Total	Type of Problem
0.08				0.08	RF Trips
0.7	0.53		0.62	1.85	Power Dip
2.15	2.2			4.35	Beam Oscillation (AI Dumped on Excursion)
0.02				0.02	Micro/ Network problems
0.75				0.75	Unknown Trip
3.7	2.73	0	0.62	7.05	

17 July 2005 Cycle Summary

Fill Statistics

	X A	U A		X B	U B		X C	U C		X D	U D		X A	U A
Cycle Starting 17 July 2005	17 July			24 July			31 July			7 August			Cycle Ave	
Planned number of User Fills	14	47		11	37		11	47		9	29		11	40
Total Number of User Fills	19	48		18	38		11	47		10	20		15	38
Fills to scheduled completion	9	45		6	36		10	44		7	18		8	36
Dumps during Operations	8	3		10	1		0	3		1	1		4.8	2
Average Time between Faults [hr]	21			18			168			142			88	
Faults Requiring Repairs	1			1			0			1			0.8	
Average Time to Recover [min]	26			18			0			68			28	
Average User Fill Time [min]	35			31			31			30			31	

Comments on 17 July 2005 Cycle

Ring Schedule	X A	Beam Avail
Sunday	O	22.8
Monday	O	22.1
Tuesday	T/O	18.2
Wednesday	O	22.3
Thursday	O	22.7
Friday	O	22.2
Saturday	O	22.9

153.2

Tuesday July 19 very rough on X-ray

Beam instabilities causing Active Interlock trips

Lost Time

- 8 X-ray injection cycles
- Insertion Device Operations Curtailed
- Feedbacks Disabled

Several teams launched in parallel to search for cause

July 27 Trim micro became focus of several lines of investigation

CPU Board was replaced July 28, trim glitches ceased

The removed CPU was set up for bench testing

- Ran for two weeks then failed
- Probable culprit in series of beam motions

Overall downtime for cycle actually lower than average